european actuarial academy

ANNOUNCEMENT

EAA Web Session
From Excel Tariff Calculators to LLM-Powered Python Code

9 February 2026 | 9:30-12:45 CET | online

Introduction

Excel-based tariff calculators remain a cornerstone of actuarial work in life insurance, but they come with well-known limitations: complex formulas and embedded VBA code, a lack of transparency, and difficulties in scaling or integrating with modern IT environments. For actuarial migrations and product validations, these tools are still widely used – yet they are also one of the main bottlenecks when it comes to efficiency and reproducibility.

Recent advances in Large Language Models (LLMs) provide new opportunities to overcome these challenges. Instead of manually rewriting legacy Excel logic, actuaries can now use LLMs to automatically port existing tariff calculators into structured, well-tested Python code. This enables reproducibility, improves maintainability, and opens the door for automation in future actuarial workflows.

In this web session, we will showcase two complementary approaches to this task. The first approach is a "crafted" workflow, where actuaries interact directly with the LLM using screenshots, formulas, and VBA modules to achieve a working Python prototype within a short time. The second approach is an "industrial" workflow, designed for repeatability and automation, where Excel structures are systematically exported into text formats and processed end-to-end by the LLM. Both approaches will be illustrated with a real-life life insurance example, highlighting their strengths, limitations, and practical implications.

Participants will not only see how LLMs can handle complex actuarial logic, but also how such methods can reduce manual effort, accelerate migration projects, and prepare actuarial teams for a future where AI becomes a natural part of actuarial toolchains. The session bridges the gap between everyday actuarial work in Excel and modern coding environments, showing how actuaries can leverage LLMs to make the transition both approachable and scalable.

Participants

This web session is aimed at actuaries and professionals in the insurance and financial industry who wish to modernise actuarial tools and workflows. It will be particularly valuable for those working with Excel-based models in life insurance, as well as for actuaries exploring applications of Large Language Models (LLMs) in their daily practice.

No deep programming knowledge is required. Basic familiarity with Excel is sufficient; all technical steps will be demonstrated live, with explanations accessible to participants without an IT background. At the same time, participants with Python or data science experience will benefit from the in-depth discussion of automated workflows and best practices.

Purpose and Nature

The purpose of this web session is to lower the first barriers for actuaries to effectively work with Large Language Models (LLMs) in practice. Many colleagues are curious but hesitant to start, as programming and AI may feel distant from traditional actuarial work. This session is designed to bridge that gap.

Participants will gain confidence by seeing how effective prompt engineering works in real actuarial tasks and how an LLM can guide them through the process. They will also experience how to design and structure a Python workflow supported by LLMs – not in the abstract, but through a carefully prepared, practical example from life insurance.

The session aims to inspire participants to explore similar applications in their own work, showing that LLMs can become both an assistant and a tutor, helping actuaries to innovate and to integrate automation into daily actuarial practice.

Language

The language of the web session will be English.

Lecturer(s)

Bartlomiej Maciaga
Bartlomiej Maciaga is a qualified actuary with over 20 years of professional experience in life insurance, specialising in product development, IT migrations, and actuarial process automation. He has been actively involved in various working groups of the German Actuarial Association (DAV), focusing on innovation and digitalisation. His current work centres on applying Large Language Models (LLMs) to actuarial practice, with a strong interest in scalable workflows and automation.

Arno Rasch
Arno Rasch is the CEO of vtmw AG, a consulting company with longstanding experience exclusively for insurance companies, with particular expertise in portfolio migrations. Under his responsibility, the firm increasingly applies artificial intelligence and automation to support migration projects and other areas of consulting. He holds a PhD in Computer Science from RWTH Aachen University, focuses on automation and AI applications in the insurance sector, and is co-editor of the yearbook *Insurance & Innovation*.

Preliminary Programme

Monday, 9 February 2026

09:30 – 10:00	Setup & Toolchain (VS Code, GitHub Codespaces, Workflow)
10:00 – 10:15	Analysing the Excel Calculator (Formulas, VBA, I/O Mapping)
10:15 – 10:35	LLM Strategies: "Crafted" vs. "Industrial" Approaches
10:35 – 10:50	Break
10:50 – 12:30	Hands-on Porting: Testing, Maintainability & Walkthrough of Chat Protocols
12:30 – 12:45	Wrap-up, QA Checklist & Next Steps

All the above times are given in CET (Central European Time).

Fees & Registration

Early Bird Registration Fee (until 29 December 2025):

- For private customers in the EU: €240.00 + VAT of the billing country (example Germany: €285.60 incl. 19% VAT)
- For private customers outside the EU: €285.60 (incl. 19% VAT)
- For businesses within the EU (excl. Germany, with valid VAT ID): €240.00 (net, reverse charge applies)
- For businesses in Germany: €285.60 (incl. 19% VAT)

Regular Registration Fee (from 30 December 2025):

- For private customers in the EU: €315.00 + VAT of the billing country (example Germany: €374.85 incl. 19% VAT)
- For private customers outside the EU: €374.85 (incl. 19% VAT)
- For businesses within the EU (excl. Germany, with valid VAT ID): €315.00 (net, reverse charge applies)
- For businesses in Germany: €374.85 (incl. 19% VAT)

Important VAT Information:

- For private customers with a billing address in an EU country: VAT will be charged at the applicable rate in the country of the billing address. The final amount, including VAT, will be calculated upon invoicing.
- For customers with a non-EU (third country) billing address: Only a non-company billing address is accepted for VAT compliance reasons. 19% VAT applies to all non-EU private customers.
- For businesses within the EU (excluding Germany), Iceland, Liechtenstein, Norway, Switzerland, and the UK with a valid VAT ID: The reverse charge mechanism applies (net price; VAT will not be charged). Please ensure your valid VAT ID is entered correctly during registration.
- For all customers with a billing address in Germany: 19% VAT applies.

Please submit your registration using this online form. Closer to the event, you will receive further login details to join the web session.

Your registration is binding. Cancellation is only possible up to 2 weeks before the first day of the event. If you cancel later, the full participation fee is due. You may appoint someone to take your place but must notify us in advance. EAA has the right to cancel the event if the minimum number of participants is not reached.

We will send you an invoice via email. Please allow a few days for handling. Please always give your invoice number when you effect payment. All bank charges are to be borne by the participant.

Registration is open until two working days before the web session. If registration has already been closed for this web session, please call us or send an email to contact@actuarial-academy.com in order to find out whether a late registration is still possible.

Technical Requirements

Please check with your IT department if your firewall and computer settings support web session participation (the programme Zoom will be used for this online training). Please also make sure to join the web session with a stable internet connection.

CPD

For this web session, the following CPD credits are available under the CPD scheme of the relevant national actuarial association:

Austria:	3 points
Belgium:	3 points
Bulgaria:	4.5 points
Croatia:	individual accreditation
Czechia:	3 hours
Denmark	3 credits
Estonia:	3 hours
Finland:	3 points
France:	18 points
Germany:	3 hours
Greece:	4 points
Hungary:	3 hours
Iceland:	3 credits
Ireland:	3 hours
Italy:	GdLA individual accreditation
Latvia:	3 hours
Lithuania:	3 hours
Netherlands:	approx. 3 points (individual accreditation)
Norway:	3 points
Poland:	3 hours
Portugal:	3 hours
Serbia:	3 hours

Slovakia:	individual accreditation
Slovenia:	individual accreditation
Spain:	CAC: 3 hours, IAE: 3 hours
Switzerland:	individual accreditation
USA:	SOA (Section B): up to 3.6 hours

No responsibility is taken for the accuracy of this information.